

FOR FLOOD CONTROL WORKS Honolulu Engineer District CEPOH-EC-T

Kuliouou08rpt-fcp.doc

1. Project Name: Kuliouou Stream Flood Control Project

2. Date of Inspection: November 6, 2007

3. Inspection Personnel:

<u>Name</u>		Agency/Office	Telephone No.	
	Dan Meyers Tyler Sugihara	CEPOH-EC-T DFM/Road Main Div.	438-8875 484-7600	
	Lani Brown	DFM/Road Main Div.	484-3624	
C .	Dalit Drown	Drm/Road Main Div.	101 3021	

4. Ratings for FY08

Project Rating: "MA, Marginally Satisfactory"

Project Condition Code: "MA, Minimally Acceptable"

Project Status: "Active"

#### 5. Discussion:

The project consist of 225 foot-long, 50 foot-wide channel (at the lower limit of the project), 1,260 lineal feet of concrete rectangular ditch, 388 lineal feet of reinforced ditch and box culverts, 570 lineal feet of concrete walls and 1,330 lineal feet of CRM walls along the banks of the existing channel.

The project inspection began at the debris basin which is located at the upper limits of the Non-Federal Project, the resumed at Sta. 46+50, the upper limit of the Federal project. Several discrepancies were noted and brought to the attention of the C&C representatives during the inspection. The major deficiencies were as follows:



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a. Debris Basin - Remove boulders from upper reach of debris basin.



b. Sta. 72+00, Debris Basin, missing drainage grating replaced, continue to remove debris.



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c. Sta. 46+50, LB, repair maintenance access road fence.



d. Sta. 46+50, overview of the upper limit of the Federal project.



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e. Sta. 46+30, RB, cracks repaired.



f. Sta. 44+50, LB, reestablish maintenance easement, remove trees as needed.



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g. Sta.44+50, RB, replace missing 6" flapgate and remove debris.

Note: Sta. 42+25, Right Bank (RB), flapgate.



h. Sta. 37+50, RB, grease flapgate hinges, (typical through-out project).



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i. Sta. 33+50, overview of channel facing downstream.



j. Sta. 30+00, RB, replace missing station numbers (typical through-out project).



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k. Sta. 29+15, RB, Grease flapgate.



1. Sta. 27+50, RB, hinge separation sealed to prevent vegetation growth, monitor movement.



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 $\mbox{m.}$  Sta. 27+50, RB, hinge separation sealed to prevent vegetation growth, monitor movement.



n. Sta. 27+50, RB, grease flapgate.



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o. Sta. 26+00, RB, 6" replace missing flapgate.



p. Sta. 23+32, RB / invert patch cracks.



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q. Sta. 22+90, invert, patch 3ea. holes.



r. Sta. 21+00, Invert patch hole and replace missing station number and missing flapgate and repair invert.



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s. Sta. 21+00 to Sta. 19+00, Invert, repair cracks and holes.



t. Sta. 20+75, LB, monitor construction joints for separation.



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u. Sta. 20+00, Invert continue to repair holes in invert.



v. Sta. 19+00, replace rusted / frozen 18" flapgate.



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w. Sta. 18+40, RB, replace missing flapgate.



x. Sta. 16+00, LB, replace missing 6" flapgate.



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y. Sta. 15+00, RB, replace missing 18" flapgate.



z. Sta. 13+00, LB, repair 2'x2' hole in CRM wall at the waterline, boat encroachment removed and fence repaired, install missing flapgate.



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bb. Sta. 11+00, Overview.



cc. Sta. 9+50, overview.



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dd. Sta. 5+00, LB, 18" flapgate frozen open, replace.

#### 6. Findings/Conclusions:

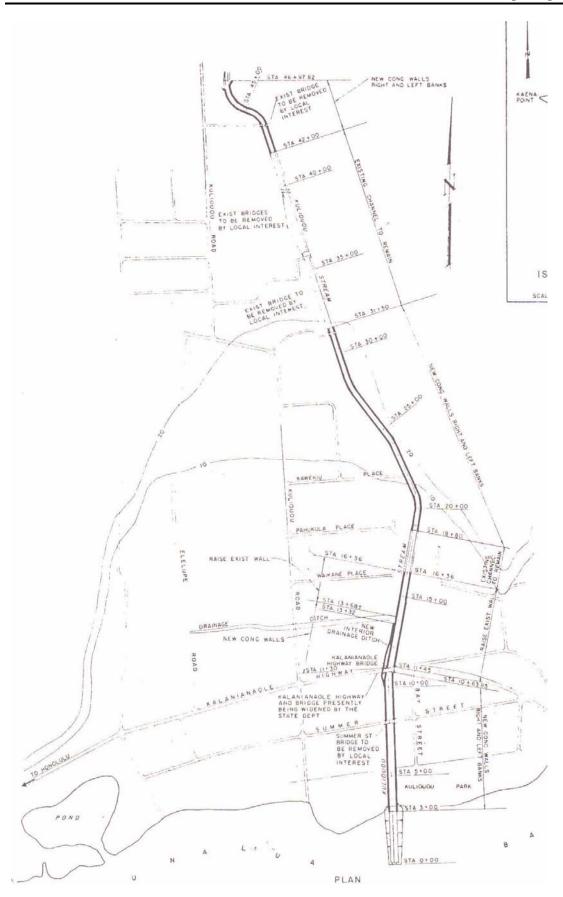
Several flapgates were missing and/or inoperable, station numbers need to be re-established and numerous holes were identified to be repaired in the channel invert. IAW ER 500-1-1, ( dtd 30 September 2001 ), and based on this CEI, the Project Condition Code is MINIMALLY ACCEPTABLE and the project is considered ACTIVE in the Rehabilitation and Inspection Program.

Signed:		
Dan Meyers,	CEPOH-EC-T	
Signed:		
James Pennaz	z, P.E.,CH,	CEPOH-EC-T

Enclosure(s)
1. Site Plan



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#### KULIOUOU STREAM, OAHU, HAWAII

#### CONDITION OF IMPROVEMENT 30 SEPTEMBER 1991

PREVIOUS PROJECTS: None.

EXISTING PROJECT: Authorized under Section 205 of the Flood Control Act of 30 June 1948, as amended. Provides for a 225-foot long, 50-foot wide channel into Maunalua Bay; approximately 1,260 lineal feet of reinforced concrete walls for a rectangular channel; approximately 388 lineal feet of reinforced concrete rectangular ditch and box culvert; approximately 570 lineal feet of reinforced concrete walls; and approximately 1,330 lineal feet of CRM walls along the banks of the existing trapezodial channel; including a new clear span bridge at Summer Street and Station 44+00, providing a bridge access road at Station 44+00. Total length of the Federal project is 4,700 feet of channel improvement.

#### PROGRESS OF WORK

Completed and Under Maintenance: The project was completed in February 1970. A contract for emergency repair to the flood control channel, damaged during flooding on 31 December 1987, was awarded in May 1988 and completed in February 1989 under the authority of Public Law 84-99.

Work Remaining: None.

#### COST OF CONSTRUCTION:

Completed Works:	New Work	Maintenance	Total
United States Funds	\$ 948,900	\$1,367,322	\$2,316,222
Contributed Funds Required Other	540,335 <u>346,376</u>	158,997 31,967	699,332 _378,343
Total Costs	\$1,835,611	\$1,558,286	\$3.193,897